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Behavioral Potentials and Kinetics

A Phenomenological Approach to the Study of Attitudes and Other Behavior Determinants

By

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FOREWORD

It hardly seems necessary to emphasize the importance of attitudes in education. Textbooks in educational psychology and elementary school methods show increasing attention to them. Their importance in personality structure, and their relation to other behavior determinants is not so commonly considered. Nor do elementary texts concern themselves with presenting any theoretical structure that permits the student to understand the nature of attitude development, change or reinforcement.

Professor Turney has been interested in these problems for many years. He has attempted to formulate a tentative though suggestive theory for contributing to an understanding of "attitudes."

We are happy to present Professor Turney's paper as one of our series of *Kansas Studies*, for we feel it will help to clarify present knowledge of attitudes and other behavior determinants.

Kenneth E. Anderson
Oscar M. Haugh

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THE UNIVERSITY OF KANSAS SCHOOL OF EDUCATION

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Introduction

This monograph is the third attempt the author has made to formulate a functional theory of attitudes. In 1935 the first appeared in *Educational Administration and Supervision* under the title "Some Psychological Aspects of Attitudes."[1] Later a revised and enlarged treatment appeared in April 1939 as "Attitudes and Education."[2] Since then the author has continued his interest in the problem and, it is hoped, has developed more insight with regard to it. Since that time the developments in the study of human abilities have need of attention and especially it appears that it is possible to apply the concepts of the phenomenal field to the problem of attitude formation and functioning.

The present attempt, inadequate though it is, represents great changes. In the first place, we are concerned with "determining tendencies" of various kinds among which are attitudes, but included are fears, likes and dislikes, and even traits. Although "attitude" may predominate in the discussion that follows, it is largely as an example of determining tendencies appropriate to our thesis.

As will appear, much more reliance is placed upon the nature of the phenomenal field, the problems of the emergence and potential of parts of this field; and a more extensive effort is made to interpret the function of affect and cognition in the development of determining tendencies and their role in the phenomenal field.

It is hoped that the reader will appreciate the complexity of the subject since the author is well aware that the following discussion can only be suggestive. Nevertheless, it is at least a plausible formulation that has had a markedly successful impact upon his counseling practice.

Specifically this is an attempt to relate the implications of our recent formulation concerning the differentiation of the phenomenal field[3] to those sources of dynamics commonly called attitudes, fears, likes, dislikes, behavior propensities and traits.

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[1] A. H. Turney. "Some Psychological Aspects of Attitudes." *Educational Administration and Supervision,* 21 (February 1935) 121-131.

[2] Austin H. Turney. "Attitudes and Education." *University of Kansas Bulletin of Education,* 4 (April 1939) 2-21.

[3] A. H. Turney. "Differentiation of the Phenomenal Field." *Kansas Studies in Education,* 6 (July 1955) 1-22.

Part I: Theoretical Structure

The Problem of Behavioral Potential and Kinetics in General

When field theoretical interpretations of behavior became more or less prominent in America during the late twenties and early thirties, there were numerous instances of dependence on concepts derived more or less directly from mathematics, physics, and chemistry, without precise psychological definitions. Such terms as field, tension, potential, dynamics and vectors became increasingly prominent, seemingly used with the meanings they carried in their disciplinary source.[1] This is not to imply that such terms had not appeared before and have not appeared since, but only to emphasize that there began at this time a more heavy dependence upon concepts from these disciplines without adequate adjustments of meaning to our own. The term dynamics illustrates very well the confusion in communication that has resulted.

In our recent publication previously mentioned, our Postulate 4 sets the general proposition, "The potential of parts in the dynamics of the field is a function of the affect, but is not a constant,"[2] and "If we agree that 'all behavior is determined by the phenomenal field at the moment of action,'[3] we have not only the task of accounting for the differentiation of the field but for the source and nature of the potentials that initiate the *movements* we call behavior. Our premise that each individual is both a cognitive and affective organism offers us the only source. The affect must provide the dynamic potential, and the cognition is the only method of origin and of control of direction."[4]

Perhaps it should be pointed out here that there is apparently a profound difference between our interpretation of field differentiation and

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[1] As will appear again and again in this paper, complete reviews of literature bearing upon aspects of our problem are impossible. Selected illustrations must suffice. Three examples of this situation are: R. H. Wheeler and F. T. Perkins. *Principles of Mental Development.* Crowell, New York, 1937; A. H. Turney. "Some Psychological Aspects of Attitudes." *Educational Administration and Supervision,* 21 (February 1935) 121-31; Kurt Lewin. *Principles of Topological Psychology.* McGraw Hill, New York, 1936.

[2] A. H. Turney. "Differentiation of the Phenomenal Field." *Kansas Studies in Education,* 6 (July 1955) 1-22.

[3] Donald Snygg and Arthur W. Combs. *Individual Behavior.* Harper, New York, 1949, p. 45.

[4] A. H. Turney. "Differentiation of the Phenomenal Field." *op. cit.,* p. 12-13.

that implied by Buytendijk[5] in certain statements such as, "I choose my emotional attitude in the same unreflective nonconsidering (thematic not thetic) mode of consciousness as I choose my words in speaking and writing." It would depend upon the interpretation of "choose" and on the qualitative difference between feeling and emotion that seems to prevail in his discussion. It seems to us that such statements as "Awareness of emotion and also of excitation . . . is a non-intentional element of every feeling, just as it may be an element in the act of touching," only confuse the issue unless "feeling" is identical with "event" in which case the term itself is objectionable because of its confused meaning.

If potential is interpreted in strictly physical terms, it may lead to misinterpretation as if there were a power source completely latent. Strictly speaking, neither the cognitive potential nor the affective potential in the case of *homo sapiens* could be entirely inactive (except perhaps in deep sleep, deep anesthesia and special conditions of induced shock). But we could have cognitive potential unrealized in part, as for example an individual such as Helen Keller, before means were provided for it to approach more nearly its maximum functionality. We have either cognitive or affective potential more or less active or more or less "distorted," that is, functioning in directions A, B, or C when D, E, or F would be "preferred."

The postulate referred to obviously applies to all moments of life space, but to avoid the criticism of over-simplification we shall be concerned with those behavior patterns, which assume such great importance in our attempts to understand, predict or control behavior, that they have achieved entity-like labels, such as attitudes, fears, inferiorities, propensities, sets, even traits, and functional autonomy.

The almost infinite variety of statements and definitions concerned with such behavior patterns forces us to use selected illustrations rather than anything approaching a complete review. When, for example, one uses the expression, "As a man thinketh, so is he," we have an illustration of a broad or general type of statement which could be interpreted as having a "propensity"[6] value.

Prior to the period typified by Pavlov's Conditioned Reflexes, the appearances in psychological literature of a nomenclature implying

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[5] F. J. J. Buytendijk. "The Phenomenological Approach to the Problem of Feelings and Emotions." *Feelings and Emotions,* the Mooseheart Symposium, McGraw Hill, New York, 1950, p. 127 ff.

[6] Meaning here "a natural inclination or bent" (Webster) without implying hereditarily fixed.

directional propensities was largely in connection with "personality," and this continued after Pavlov.[7] To pick at random, in Theophrastus' Characters, his discussion of the Penurious Man[8] is an example. Likewise many "traits" or determining tendencies[9], as well as "inferiorities," "inferiority complexes," and other psychoanalytic mechanisms may be included.

In his extremely able book, Allport discusses trait and attitude (both determining tendencies), presenting his interpretation of their kinship and differences. "A trait is a form of readiness for response; so too is an attitude. A trait is individualized, distinctive of its possessor; so too may be an attitude. Both may be regarded as biophysical in nature, combining, in any proportions, the fruits of heredity and the fruits of learning. Are trait and attitude, therefore, equivalent concepts?

"There is indeed a great similarity . . . . To take one example, introversion and extroversion have been regarded both as *traits* of personality and as *attitudes* toward reality. Either designation is acceptable."[10]

He goes on to present what he believes are three distinctions. To quote again:

"1. In the first place, an attitude has a well-defined object of reference, either material or conceptual whereas traits have no such definite reference to objects. One's point of view toward liquor or frog's legs, toward Arctic exploration, divorce or Fascism are attitudes, but one's conservative, radical, ascetic, indulgent, reserved, or expansive manner of behaving is a trait. *The more numerous the objects that arouse an attitude,* the *more closely does the attitude resemble a trait.* (Italics ours.) The more an attitude is specific and stimulus bound, the less does it resemble a trait."

"2. As this last statement implies, attitudes may be specific as well as general; whereas a trait may be only general . . . .

"3. The term attitude, furthermore, usually signifies the acceptance or rejection of the object or concept of value to which it is related. Ordinarily, attitudes are favorable or unfavorable, well-disposed or ill-disposed; they lead one to approach or withdraw, to affirm or negate . . . .

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[7] I. P. Pavlov. *Conditioned Reflexes* (Trans. by G. V. Aurep). Oxford University Press, London, 1926.

[8] Gordon W. Allport. *Personality, A Psychological Interpretation.* Henry Holt, New York, 1937, p. 57.

[9] *Ibid.,* p. 290.

[10] *Ibid.,* p. 293.

"Both attitude and trait are indispensable concepts. *Between them they cover virtually every type of disposition with which the psychology of personality concerns itself.*" (Italics ours.)

We will of necessity refer later to Allport's formulation, since we believe that the phenomenological approach hereinafter applied offers a more adequate explanation of the nature, origin, change, and control of determining tendencies of any sort, whether attitudes or traits or functional autonomy, than any other.

We mentioned above, Pavlov's conditioned reflex as a sort of landmark, as indeed it is, for in this type of work, also perhaps in the 'conditioned emotional response', there was present the raw material for an entirely different interpretation than that usually made. Pavlov's[11] "freedom reflex" and "investigatory reflex" idea was largely disregarded, and the kinship between his analyzing-synthesizing function of the brain[12] and insight was ignored, although the analyzing function of the brain has its present-day counterpart in the "screening function."

There were of course many reasons why the possibilities of these contributions could only be interpreted as they were, of which we will mention only two that are of great import in connection with our thesis. The first was the arbitrary separation of intellect and feeling that began we know not where but is plainly reflected in such statements as:

"Then we shall have reasonable grounds for assuming that these are two principles distinct one from the other, and for giving to that part of the soul with which it reasons the title of the rational principle, and to that part with which it loves and hungers and thirsts, and experiences the flutter of the other desires, the title of the irrational and concupiscent principle . . . . "[13] This complete separation continues to date in such expressions as "the intellectual life," and "the emotional life of the child."

The other reason was the lack of a methodology that would bring about a reappraisal of individual behavior and personality, such as is available in the phenomenological approach. It is the purpose of this paper to apply the concepts presented in our recent paper to the problem of "determining tendencies."

Behavioral Potentials

Individual behavior with which we are concerned reveals aspects common to the species and aspects that are unique. The problem of the

[11] Pavlov. *op. cit.*, p. 11-12.

[12] *Ibid.*, p. 110 ff.

[13] Plato. *The Republic* (in Benjamin Rand, *The Classical Psychologists*). Houghton Mifflin, Chicago, 1912, p. 34.

generality or uniques of human characteristics is a fundamental one and closely allied to the old problem of heredity and environment. When that variety of field theoretical interpretations of behavior known as Gestalt psychology first began to intrigue American psychologists, there were varied outcomes of its consumption as related to this fundamental problem. At least some of the adherents (or disciples), such as some 'Organismic psychologists,' seemed to find in field concepts a basis for so minimizing "inheritance" that it appeared to lead almost to the position that there are no individual differences by construction as we have implied.

Yet there seems to be no possibility of adequately interpreting the differentiation of the phenomenal field and hence particular behavioral events without recognizing that at the moment of beginning of the field there are individual differences in structure by "construction." It is not too important whether these differences are wholly genetic paravariations or structural variations of intra-uterine development, except that we may need to recognize relative degrees of possible change.

Variations by construction would certainly affect the physiological functioning that underlies all behavior. This emphasizes the notion of individual differences in *possibilities* of behavior. We need not labor this concept. For our purposes, we can limit ourselves to a consideration of the two fundamental characteristics of humans treated in the previously mentioned paper,[14] viz. cognitive and affective.

And even though no precise limits can be set to potentials by construction, it is important that we consider them in the use of the phenomenological interpretation as a method. This is not to imply that the problem is settled. It will depend somewhat upon the definitions employed.

Cognitive Potential

The last statement can be illustrated in the case of cognitive potential by selecting from a multitude of discussions a single one:

"II. *Characteristics of Humans in Which the Embryological and Environmental Fields are Codeterminant*

"A. Intelligence. We now turn to those personality traits which are decidedly conditioned by the embryological field but which are highly modifiable by manipulation of the environmental field. Chief of these is that constellation of traits which psychologists call intelligence.... From the standpoint of field theory, intelligent behavior is behavior

[14] A. H. Turney. "Differentiation of the Phenomenal Field." *op. cit.*

which arrives at goals. Until very recently psychologists and biologists always believed that this factor was almost completely determined in the germ plasm and in the embryological field. The I. Q. as a measurement of these correlated traits was considered constant so that one accurate measurement would fix it."[15]

Since this is not a treatise on the nature of intelligence, we will not reproduce all of the intriguing discussion of this able interpreter of field theory as of 1936, but use it to point out desirable changes in interpretation.

We will pass over lightly the misleading implication that field theory necessitates the acceptance of "from the standpoint of field theory intelligent behavior is behavior which arrives at goals." Elimination arrives at goals and no doubt it is intelligent at times to eliminate, and especially in certain places and a certain manner.

The major point is that "intelligence" or "intelligent behavior" looks at the result of the functioning of the cognitive potential and not at the potential itself. The changes of I. Q. interjected above may or may not involve changes of potential. Three types of changes in I. Q. may be accepted.

1. Changes that are a function of the test, which should include the interpretation as in the case of marginal passes.[16]

2. Changes that result from environmental influences on the integrity and therefore the physiological functioning of the cerebrum, as syphilis, and cretinism.

3. Changes that result from environmental influences impeding the use of the potential in near maximal fashion in the developmental years.

Only the second of these represents a genuine change in the potential. We are not therefore arguing that the cognitive potential is absolutely fixed by construction. (Actually, very few if any competent students have ever done so.) But we are insisting upon the difference between the potential and the results of its functioning. Only by so doing could one appreciate the full implications of Dr. Brown's excellent discussion of "Characteristics (of humans) chiefly determined by the structure of the Environmental Field."[17]

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[15] J. F. Brown. *Psychology and the Social Order*. McGraw Hill, New York, 1936, pp. 270-271.

[16] Florence Goodenough. *The Kuhlman-Binet Tests for Children of Pre-School Age: A Critical Study and Evaluation*. University of Minnesota Press, Minneapolis, 1938.

[17] J. F. Brown. *op. cit.* p. 272.

The practical import of individual difference in cognitive potential is great. Very bright young children will develop fears of non-objective origin at an earlier age than dull children because they recognize relationships between abstract and/or non-objective fundaments; the latter cannot do so on the same level. The range of fundaments is greater, and the anticipatory perceptions more "complete."

But more fundamental than the differences in cognitive potential is its universal fundamental role in the emergence and differentiation of the phenomenal field. Our postulate 1 is basic; "The emergence of a part of the phenomenal field is a cognitive event always accompanied by some degree of affect."[18] "By construction the human organism inevitably and continuously exhibits cognitive processes."[19] Without this, events in the field are impossible.

In our recent paper we referred to a brief sketching of neurological data supporting the assumption that man is a cognitive animal by construction.[20] Also in this recent paper considerable data were referred to establishing postulate 6 viz. "There is some degree of awareness of each and every differentiation of the field." If all events in the field are cognitive we then limit our definition of cognition to events of some degree of awareness. A little more attention to this whole problem is advisable here.

In his excellent and concise review of "various theories of cerebral function . . ." Ross develops his concept of integration as a basic cerebral function.[21] We find his interpretation very agreeable to our own. "Integration is here proposed as a construct for a basic cerebral function, believed to fulfill the criteria previously enumerated. It is postulated that integration in one form or another is essential for behavior in general and for intellectual activity in particular . . . .

"Integration is defined as the function which combines and relates discrete cues in order for a unified response to occur . . . . Responses may . . . be either covert, overt, or both. For certain forms of integration a subsidiary process, differentiation, must be postulated."[22]

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[18] A. H. Turney. "Differentiation of the Phenomenal Field." *op. cit.*, p. 5.

[19] *Ibid.*

[20] A. H. Turney. "The Psychological Basis of Grouping." *The Grouping of Pupils.* Thirty-fifth Yearbook of the National Society for the Study of Education, Part I. University of Chicago Press, Chicago, 1936, p. 81-115.

[21] Alan O. Ross. *Integration as a Basic Cerebral Function.* Psychological Reports. Monograph Supplement 2. Southern Universities Press, Louisville, Kentucky, 1955.

[22] *Ibid.*, p. 191.

As Ross says, his conceptual scheme is no innovation. We believe our own interpretation is justified. The integrative function of the cerebrum is the physiological basis of the organism's adjustment (or behavior) resulting from cognizing relationship between fundaments from the "simplest" to the most complex.[23] We prefer fundament to cue since the latter is defined by Webster as "a hint or intimation" and this is a result of the relationship established between fundaments (or about fundaments). Fundament refers to basic fragments of the universe or in "higher" level cognitive events, constellation of fundaments whether "real" or "abstract."[24] We have also limited cognition to events at some level of awareness though we would not argue that the integrative actions of the nervous system (not necessarily the cerebrum) might be basic to behavior not in awareness, but we would argue that such behavior is not subconscious in the psycho-analytic meaning. Phenomenologically speaking, any cognitive event in the field is a differentiation since it appears, psychologically, at least, better to limit differentiation to change in the field. We conclude therefore that our premise is justified that humans are cognitive organisms, all possessing some potential for cognitive behavior by construction, recognizing individual differences in this potential.

Affective Potential

We have assumed that humans are by construction "affective organisms," and that the intensity of the affect varies, in the individual, in different moments of life space, from just a little more than none to an intensity destructive to the organism. In postulate 4 we presented the interpretation that the only source of "dynamics" or "movement" is the affect present in each and every event in the field.[25]

Whether or not there are individual differences in affective potential by construction would be hard to prove. That is, does one individual react more violently (or strongly, if you prefer) to the same stimulus (situation) than another because his nervous organization is more "sensitive" or more "irritable"? Or are all differences that we seem to recognize in such statements as "she is a very sensitive" person ac-

[23] This is discussed in more detail in A. H. Turney, *Differentiation of the Phenomenal Field,* p. 3, 4, and 5.

[24] It is our hope that in a later paper the problems of cognition, awareness, and consciousness may be treated more extensively by the phenomenological method.

[25] Postulate 4: "The potential of parts in the dynamics of the field is a function of the affect, but is not a constant."

countable only on the basis of past field differentiations? It would be of great value to know whether the first condition exists and what is the basis of it. That it is highly probable seems to be a justifiable conclusion on the basis of physiological literature.

Such statements as "Apparently certain forms of emotion affect primarily the sympathetic and others chiefly the parasympathetic division of the autonomic nervous system, *although individual variations are common,*"[26] (italics ours) and, (referring to Wolff) "Well defined emotional conditions seem to induce specific autonomic downward discharges which, within certain limits, appear to be modified by *inherent individual characteristics* (italics ours) based on changes in the autonomic balance or on a preferential susceptibility of a certain branch of the parasympathetic or sympathetic autonomous nervous system."[27]

Several contributors to the *Procedures of the Association for Research in Nervous and Mental Diseases* present materials substantiating the hypothesis.[28] One illustration will suffice here. Kallmann's summary runs (in part) "In conclusion, it may be said that in order to understand certain basic principles in the formation of psychotic behavior patterns, it is necessary to delve into the substratum of gene action as well as into the subconscious. While psycho-dynamic concepts make it possible to describe the frustrating phenomena experienced by a psychotic patient, the genetic approach aims at supplying adequate answers to questions of why a particular member of a particular family at a particular time will undergo these particular experiences, and why other members of the same unit will not."

"In so doing, genetic studies have in many instances succeeded in confirming the belief, at least theoretically, that mental disorders are both preventable and potentially curable (italics ours) .... It is now clearer than ever that only when attitudes of optimistic complacency toward the causes of severe maladjustment give way to a realistic awareness of the incompleteness of knowledge regarding the genetic aspects of psychotic behavior patterns, will further significant progress be made."[29]

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[26] Ernst Gelhorn. *Physiological Foundations of Neurology and Psychiatry.* University of Minnesota Press, Minneapolis, 1953, p. 338.

[27] *Ibid.*, p. 339.

[28] *Genetics and the Inheritance of Integrated Neurological and Psychiatric Patterns.* Williams and Wilkins, Baltimore, 1954.

[29] Franz J. Kallmann. "The Genetics of Psychotic Behavior Patterns." *Ibid.*, chapter 21.

It is not fatal to our method that we cannot finally answer this question, since it does not destroy our assumption previously stated. Individuals show the ability to react affectively in varying degrees of intensity and the affect is a characteristic of every event in the field.[30]

If postulates 1 and 4 are sound,[31] then "attitudes," "fears," and other behavioral determinants differ only in the degree of affect by virtue of which they are more powerful, or in the degree of reinforcement by virtue of which they are more stable or both.

In this approach to the understanding of behavior determinants the close relationship between cognition and affect is fundamental. Our postulate 5 is "The differentiation of the field (or any part) is a cognitive function, its associated affect changing in direction and/or intensity with each state of differentiation." To ignore this is to lose the basis for changes, reinforcement, or reduction of attitudes, fears and more deeply reinforced kindred determinants such as traits or conditions labeled neuroticism. This does not mean that a determinant may not be so stabilized that changes are difficult if not impossible to produce.[32]

Behavioral Kinetics

Because the term "behavior" tends to focus upon movement of the organism involving somatic structure, we shall use the term kinetics or "movement" to apply to any functioning of any and all structure that initiates (or revives) an event in the field with or without actual or observed bodily movement of any sort. Since by postulate 6[33] there is some degree of awareness of each and every differentiation of the field, we do exclude certain movements or behavior of some structure of which we are not aware (such as the behavior of the Malpighian tufts or bodies). This does no violence to our argument. In applying the phenomenological method to field differentiation and movement, we are by previous postulates limited to events of which the individual is aware to some degree. Hence, the term kinetics (field movement or behavior) applies not only to movements of great complexity, such as

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[30] Postulate 1: "The emergence of a part of the phenomenal field is a cognitive event always accompanied by some degree of affect."

[31] Postulate 4: "The potential of parts in the dynamics of the field is a function of the affect, but is not a constant."

[32] A. H. Turney. "Differentiation of the Phenomenal Field." *op. cit.,* p. 11.

[33] Postulate 6: "There is some degree of awareness of each and every differentiation of the field."

those going on as this is written, but to the first "vague" perceptions of light, coldness, or discomfort of the neonatus.

As previously stated, we have accepted the basic postulate of Snygg and Combs: "All behavior, without exception, is completely determined by and pertinent to the phenomenal field of the behaving organism" and their definition; "By the phenomenal field we mean the entire universe, including himself, as it is experienced by the individual at the instant of action."[34]

Since this definition "implies that this field is a differentiated field, which though unified has distinguishable parts as for example 'himself,' "[35] at any instant of action the particular pattern of behavior at that instant results only because of the particular resolution of the 'dynamics' in it. The dynamics as already stated have no source except the affect coexistent with events emerging or existing all of which are cognitive events with varying affect. The affective potentials are neither all positive nor negative nor of the same intensity. Behavioral kinetics then, strictly speaking can be restricted to the field movements, themselves. This permits a better understanding of the intimate relationship between the phenomenal field (a field of mental constructs in the last analysis) and the observed overt behavior than does the more crude formulation we have previously suggested of including subjective and overt movements as behavior. The latter though true makes it more difficult to interpret field properties.

Nor does this limitation permit an arbitrary dichotomizing of field "behavior" and "overt-behavior" since the phenomenal self is aware of his universe including his own overt behavior and this in turn affects the field itself since any awareness is cognitive and becomes therefore an event in the field with accompanying affect.

There is a great importance to this discrimination between the kinetics of the field and the overt behavior dependent upon and relevant to it. The oft repeated statements about the so called "catharsis" accompanying or following "talking it out" illustrates. The effect of "talking it out" or any other overt behavior depends upon the manner in which the behaver interprets it. It can and often does reinforce rather than reduce the disturbing part or parts of his field. The same observance can be made of many short cuts to therapy, i. e. play therapy, psychodrama, role playing.

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[34] Snygg and Combs. *op. cit.*, p. 15.

[35] A. H. Turney, "Differentiation of the Phenomenal Field." *op. cit.*, p. 1.

Part II: Applications

Attitude Formation

The importance of "attitudes" and attitude formation has been more emphasized since the earlier treatments. There are direct recognitions in practically every beginning textbook of Educational Psychology, and indirect recognition of it in statements of objectives, discussions of adjustment, behavior problems, and many other settings. Yet there are few, if any, specific theoretical structures available that serve to clarify the nature of their origin or the procedures for their development, reduction or reinforcement, or that provide anything approaching an understanding of their role in the dynamics of behavior.

The term attitude lacks clear delimitation as is to be expected in the absence of a clear-cut theoretical structure. We speak of attitudes of fear and withdrawal or timidity in connection with the child's mental hygiene; of cooperative attitudes; of scientific attitudes; of "poor" and of "good" attitudes. Attitudes are mentioned in discussions of motivation, learning, personality, and adjustment.

In addition to the confused way in which the specific term itself is used, there is no theoretical structure permitting a better understanding of the relationships, if any, between attitudes, prejudices, fears, likes, dislikes, interests, motives, and anxieties, and more particularly deeply intrenched or stable patterns such as traits (introversion-extroversion) or autistic or neurotic behavior.

If as we believe there are basic similarities between all of these labeled behavior determinants, it should be legitimate to approach the problem by considering a simple instance.

As an illustration of the origin of a simple fear, we will use one discussed in a former treatment of attitudes,[1] since it is a factual one about which there is little doubt. A mother was holding her sixteen-months-old child in her arms while she pointed out to him and talked about the color, and light, and clouds in the western sky as a storm was rising. In its childish way it was interested, and certainly was unafraid. Suddenly it began to rain, large drops falling upon the infant's hands, head, and face. For an instant the mother noticed that the baby appeared unafraid or perhaps even pleased, but this phase was of short duration, for the mother cried out, clutched the child tightly, and ran into the house. The child then reacted strongly, clinging to its mother

[1] Austin H. Turney. "Attitudes and Education." *University of Kansas Bulletin of Education*, 4 (April 1939) 2-21.

and crying. It continued to cry when inside the house as long as the rain pelted the windows and ran down the panes. A few days later while playing inside the house it cried when it saw rain striking the window. Thereafter it showed fear of rain whether it was inside or outside.

We have here the emergence in the field of a complex event but with rather obvious cognitive and affective phases. Even though we cannot make a specific detailed representation of the data or fundaments involved as the child cognized them, we can with some assurance approximate them as

rain
rain drops
impact of drops
coolness of drops
wetness of drops
and perhaps other fundaments.

All of these probably had a positive affect. But also there is the mother's cry, clutching and running, all with strong negative affect. The field movements, then, must certainly be represented by something like a conclusion that "rain is bad," or "mother is afraid of rain," and/or "I'm afraid," "I want to get away from this."[2] That the "movement" or "behavior" is not exactly like this symbolic representation may be granted, since some of these symbols are not available to this child, but we cannot say that it is not clear or precise. The child's cognitive processes were definite enough that so long as he remembered the event, i. e. as long as it is in the field, his behavior is such that we say he is afraid of rain. The degree or intensity of the affect not only furnishes the potential but determines the stability of the pattern.[3] But it should be noted that without the cognitions that occurred the affect would have differed. Had only the first group of fundaments listed above been in the field, the affect would have remained positive as was actually noted at the time.

If we select an event occurring at an earlier age when verbal symbolism plays an even lesser part, it is still possible to see the probable fundaments, affect and movement in the field of "simple events."[4] An

[2] Postulate 1: "The emergence of a part of the phenomenal field is a cognitive event always accompanied by some degree of affect," and 4: "The potential of parts in the dynamics of the field is a function of the affect, but is not a constant," and 5: "The differentiation of the field (or any part) is a cognitive function, its associated affect changing in direction and/or intensity with each stage of differentiation," are all closely illustrated here.

[3] Postulate 5. See above.

[4] These cases were all carefully observed by the writer.

eight month's old child was giving its mother much concern in refusing to eat its spinach, green beans, and other vegetables. We observed the feeding situation. The mother held the child firmly, tightly on her lap, and using a spoon she would attempt to push (or shovel?) the food into the squirming child's mouth. There was a good deal of talking on her part as well as pleading and scolding. By the time we saw the child, its field already had developed to the point where the vegetable-feeding situation was a threat. If we tried to interpret the first event of this sort, (as we must to understand) the negative fundaments are the clutching or tight holding, the pushing in of food and discomfort of the closely held child. In the first event the particular food probably had no negative affect; if any affect at all it would probably have been positive. At this stage (when observed) of total field differentiation, the child is incapable of the cognitive process necessary to discriminate between the source of negative affect and the specific food.

To help the first mother, another child was visited. It sat in a high chair with a bowl of spinach in reach, a baby spoon in its hand, the toes of one foot on the edge of the table and was having a "good" time with the spinach, some of which reached its mouth. All the affect here was positive. The "total situation" was lacking in negative affect and there was no resultant behavior pattern such as the first child had. The two "attitudes" were of necessity what they should be, and could only be.

It should not be overlooked at this point that the very first event would not necessarily result in a lasting negative attitude or a positive one in either of these cases, since the affect was not strong enough, but with each reoccurrence of this experience the stability increased, the reinforcement being a function of re-experienced affect which occurs only because the data are similar and hence the affect is similar, and resulting movement is similar but not identical, the pattern being either reduced or increased in stability.

If one uses the postulates previously set up to study the origin and stabilizing of such behavior determinants as "inferiority feelings" or inferiority complexes, it is possible to see the similarity of their origin and stabilization. The beginning of them must and do satisfy the conditions of postulates 1, 4, 6, and 7[5] and further differentiation satisfy

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[5] Postulates 1 and 4 quoted page 14. Postulate 6: "There is some degree of awareness of each and every differentiation of the field." Postulate 7: "The precision and clearness of the cognitive event and the affect associated with it are both determiners of the degree of awareness."

these and 2, 3, and 5.[6] The intensity of the affect of the first event will determine to some degree the nature of subsequent events perceived as having any relationships similar to the first, and in so far as they do, reinforcing the interpretations and the affective characteristics. Over larger durational units of life space the phenomenal field would thus become more stabilized in all parts that are "close," psychologically speaking, to these events.

However, should new events occur, before the degree of stabilization was great, involving data and/or relationships of opposing import and affect, they might be incorporated into the field and alter the interpretation of the individual's universe.[7] This justifies the conclusion that such behavior determinants as inferiorities can best be altered at early moments of their emergence.

There is no logical reason to avoid the inference that those behavior determinants catalogued as traits are basically different. In Eysenck's scholarly appraisal of research concerning personality there appears again and again the suggestion that introversion-extroversion may be a basic trait, as also stability-neuroticism (instability).[8]

Considering introversion-extroversion, let us suggest that, although as Allport has said it has been regarded as a trait and as an attitude, it is not an attitude but a label for commonly observed behavior patterns resulting from an attitude or more properly many attitudes. There must without doubt be a beginning cognitive event with resultant or included affect leading to the first behavior or movement which would if detected indicate a favorable or unfavorable "attitude" toward others. Thus, an immature individual might, if we provide rather advanced symbols, interpret the event in such ways as "I am afraid of" or "I feel ashamed with," or more vaguely, "I don't want to 'play with,' 'go with,' 'join' these kids." Again let us say that the events do not take this actual form. In very early years certainly no such symbols could be employed, but something similar ***must*** occur. This only emphasizes the need for some method of study that will give us clearer understanding of the actual nature of the fundaments as the individual cognizes them and of the intensity of and "reason" for the affect.

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[6] Postulate 2: "The whole field determines in part the nature of its parts . . . " Postulate 3: "Any part determines in part the nature of the field and affects its dynamics at the moment of action." Postulate 5: "The differentiation of the field (or any part) is a cognitive function, its associated affect changing in direction and/or intensity with each stage of differentiation."

[7] A. H. Turney. "Differentiation of the Phenomenal Field." *op. cit.*, p. 11-12.

[8] H. J. Eysenck. *The Structure of Human Personality*. Methuen Company, London, 1953.

We might assume with fair assurance that at some early period an individual's field differentiation (and of course its dynamics) has been such that participation in groups (play groups, for example) has been enhancing. A single unpleasant event would probably not be sufficient to reverse the dynamics, unless the affect were very intense, but if events involving others (children perhaps) threatening to the individual's phenomenal self continue to emerge and/or are re-experienced overtly or subjectively, the negative attitude or attitudes become increasingly reinforced, determining behavior characterized as timid, withdrawing, retiring, and eventually introverted, neurotic or even psychotic. Or the reverse can occur if the events involving others have positive affect and are reinforced.

At this point it must be pointed out again that there may be individual differences in affective response by structure. Since we accept the definition previously quoted, "By the phenomenal field we mean the entire universe, *including himself* (italics ours), as it is experienced by the individual at the instant of action,"[9] the individual is a part of the field and hence individual differences by construction must affect the nature of the field. But certainly there is no evidence that there are specific patterns embryologically fixed that predetermine patterns of behavior characterized as introverted or extroverted, or neuotic. The only conclusion possible is that they are "learned," that is, that the character of the field differentiation and stabilizing is such that these patterns of behavior result from the dynamics of the field. The postulates previously presented explain the process of the differentiation and the stabilizing. Whether we call them traits or not is of little significance. The patterns are the result of field differentiation in which events with strong affective values determine the dynamics, i.e. movements.

The same can be said of fears, prejudices, taboos, and "interests" when we speak of interest in things, or people or activities, and we believe any consistent behavior patterns such as those labeled neurotic or psychotic.

With reinforcements, i.e. re-experiencing the events that determine the kinetics of the field, the "attitudes" or behavior determinants may increase in potential and stability to the point that the behavior called withdrawing, or neurotic, or even psychotic characterizes the individual patterns of adjustment more or less consistently. In extreme situations the potentials and resulting kinetics may reach the point where new

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[9] Donald Snygg and Arthur Combs. *Individual Behavior*. Harper, New York, 1949.

events are not received into the field at all, or with difficulty. This would follow from postulate 2 "The whole field determines in part the nature of its parts" and 5 "The differentiation of the field (or any part) is a cognitive function, its associated affect changing in direction and/or intensity with each stage of differentiation."[10] The reoccurrence of an event or the occurrence of similar events may intensify the affect as in the case cited.[11]

It is in this way that the degrees of behavioral determination build so that "personality", which is after all only a term applied to the phenomenal field structure, will contain very slight determinants as very mild likes or dislikes, stronger as fears and wishes, and intense as those determining introvert, neurotic and psychotic behavior. Otherwise there is no adequate explanation for the query "why a particular member of a particular family at a particular time will undergo these particular experiences, and why other members of the same unit will not" quoted above. That is to say that two individuals who by structure are equally more liable to higher or more intense affective potential will not develop similar phenomenal fields, one adjusting "better" than the other depending upon the accident of the universe that effect the development of the field. Or the opposite situation may exist (in theory at least) where of two individuals in similar situations one may adjust better or worse than the other because of structural differences as implied in the statement quoted.

Since the operation of the conditions in the first of these two cases, i. e. the origin, development, reinforcement and change of behavioral determinants is basically similar, we consider them further in connection largely with the generic label, attitudes.

If the argument to this point is sound, it is then desirable to concern ourselves with conditions and events external to the phenomenal field which affect it, viz. the controls of data and affect. This brings us into contact with a problem that has vexed attempts to use field theory as a method since Lewin first posed it, viz. the problem of lawfulness. The statement, "All events are lawful including those which occur only once,"[12] is the one in point.

We have accepted the position that "All behavior, without exception, is completely determined by and pertinent to the phenomenal

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[10] This "and/or" is a correction of the formulation in the original article: A. H. Turney. "Differentiation of the Phenomenal Field." *op. cit.*, p. 15.

[11] *Ibid.*, p. 11.

[12] Kurt Lewin. *Principles of Topological Psychology*. McGraw Hill, New York, 1936, p. 10.

field of the behaving organism."[13] Then all behavior of an individual is lawful in the sense that it is determined by the structure of this field. We can use it in no other sense, and for our purposes cannot go beyond the field in our use of it. Events outside the field that may affect it are accidents of the universe so far as the individual field is concerned. That individual A is born to a mother who is a neurotic is an accident of the universe so far as A is concerned. That student X comes to the counseling bureau for help with a personal problem is lawful, that he sees counselor Y is an accident of the universe so far as X is concerned unless he asks for Y when to that extent it is lawful.

This is not to argue that there is no lawfulness in the universe qua universe. Nor that in groups or communities or cultures there is no lawfulness. That is not our problem here. We are concerned with a rigid application of our postulates to the individual phenomenal field, and we must recognize the existence of events outside the field which affect the emergence of events within the field, and further that they *"could"* be different so far as the individual field is concerned.

These external events may give the appearance of deliberate control by adults singly or in organized groups. They may appear to be random events. Let us look at some of the adult controls that determine attitude used here in its broadest implications.

1. *Adult interpretation controlling affect.* Referring again to the illustration of the child learning to fear rain, it is important to emphasize that the child's own experience with the rain would probably have had only positive affect up to the moment the mother's behavior provided data of strong negative affect when she cried out, clutched the baby, and ran. If we imagined substituting very hot drops of water or hail stones instead of rain, negative affect would have resulted without adult intervention. But many if not most of the attitudes, prejudices, fears, and taboos that determine the direction of behavior could scarcely result or be so strong from direct experience alone.

Children may develop fears of the dark, of tramps, of death, or fire, or develop religious intolerance, race prejudice, and political bias very early because of adult control. The young run the gauntlet of adult prejudice in homes, and communities where labels such as "labor union," "capitalism," "communist," "loyalty," and so on *ad infinitum* are already heavily charged positively or negatively by the adult.

These adult manipulations are not of course confined to any one period of development. It is a major factor throughout the period of

[13] Snygg and Combs. *op. cit.*, p. 15.

growth (for that matter all life). It is a frequent occurrence to find young women unable to adjust to the marriage relationship because of their attitudes toward men and/or sex affected by their own unhappy mothers, or by puritanical attitudes toward sex in the culture.

It is intriguing to consider in this connection Kanner's presentation concerning early infantile autism.[14] Without discounting possibility of structural differences one can nevertheless note his conclusion No. 4. "The vast majority of the parents . . . are cold, detached, humorless perfectionists .... They treat their children about as meticulously and impersonally as they treat their automobiles."[15]

There is a readily observable intensity in adult controlled interpretation of data in advertising, campaign speeches, editorializing, comic books. When an unctuous announcer tells the youngsters that the marvelous new cereal "Sawdust Centers" will make it possible for them to get *good* grades in arithmetic or be chosen for the baseball team; when political opponents are characterized as "disloyal," "security risks," "socialists," and "brain trusters," there is introduced into the situation intense affect which, if unopposed by other affect or other data with different affect, determines the attitude with certainty and definiteness.

But the affective interpretation is so closely dependent upon deliberate manipulation of the quantitative and qualitative aspects of "data" that this characteristic of *adult* control needs careful scrutiny.

2. *Adult control of "data" is a familiar phenomenon.* But we grow callous to its effects and tend to accept them as something inherent in the culture. The taboos of a culture illustrate this well. The indifference to the "data" in comic books, and especially the belief that only the unstable are precipitated into crime because of it is another illustration. We cannot approach this problem with prejudicial attitudes of our own and hope to understand it clearly. We need sorely to attempt as objective an evaluation as is in our power.

The following illustration provided by one of my students serves quite well to illustrate control. "Karon, a three-year-old girl, was visiting in the home where I lived. She was playing on the floor when the pet Dachshund ran up to her and licked her face. Her mother screamed at the dog, saying, "bad, dirty dog," and similar epithets. At first Karon's reaction to the dog was merely curiosity, but when the mother

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[14] Leo Kanner. "To What Extent is Early Infantile Autism Determined by Constitutional Inadequacies?" *Genetics and the Inheritance of Integrated Neurological and Psychiatric Patterns*. Williams and Wilkins, Baltimore, 1950, p. 378.

[15] *Ibid.*, p. 384.

screamed, the child became frightened and began to cry." Here the mother is controlling the "facts" about the dog, "dirty," "bad," and so on, and insuring the negative affect by her screaming and insofar as "bad" or "dirty" have any inherent meaning for the three-year-old, by her control of these.

Another instance provided by one of my students illustrates a very common type of control of attitude formation. A boy, Jim, has a younger nine-year-old sister who seems to be of more than average intelligence. Jim has always been bright in school but for some reason never liked arithmetic. His constant reference to this fact—that he disliked arithmetic, that he never did well in it, that he hated arithmetic —affected Jeanne to the extent that she disliked it also. Her grades in arithmetic began to fall. The older brother is controlling the data about arithmetic and in such way as to carry only negative affect. Arithmetic is bad. With no other data of opposing quality and with these particular data so often experienced and thus reinforced, the outcome is inevitable. Had she had enough experience of her own of positive affect, or secured it from others at this time, a different outcome would have resulted. Actually this happened later when an older girl, understanding what had happened, began to provide opposing data. She began to say that she *liked* arithmetic, that it was her favorite subject, and in addition to such statements succeeded in getting Jeanne to participate in arithmetic games which she (Jeanne) found interesting and pleasing. Gradually the new data and interpretation lead to a change in Jeanne's attitude toward arithmetic.

This illustration is closely representative of the way in which many of our controls, such as taboos, religious attitudes and feelings, and political prejudices develop over a period of life space. By controlling the data and exaggerating the affect, the adults and adult agencies direct the formation of behavior determinants more or less compatible with those of the group or groups in which the individual is immersed.

The selection and control of data in the home or by individuals may be of less importance than that exercised by communities, organized agencies, such as the press—including advertising, the church, the radio, and television. These agencies control the data and affective interpretation that dominate the political, social, and economic attitudes (feelings and beliefs) in the culture, and also because of their pretended or actual adherence to beliefs in a competitive society, exert strong influences on the formation of attitudes affecting the individual's interpretation of himself and hence establishing trait-like determinants.

One of the major instances of group control of data is seen in the case of religious organizations. The growing child is early in life restricted to the "facts" and their interpretations compatible with the beliefs of its elders holding allegiance to a specific creed. The affect of these data are intense, rightly or wrongly associated with "salvation," "eternity," "heavenly bliss," or "hellish damnation;" their effect upon the inferences and judgments of the individual are enormous. The attitudes (including beliefs) that result from these experiences, these events, are strong and resist change. Psychologically speaking, there is ample explanation not only of the ready acceptance of religious dogmas but for the strong prejudices resulting in religious conflicts throughout the ages.

In advertising we have the same restricted presentation of data with similar attempts at controlling affect. When the advertiser's representative tells the youngsters that a certain food product is "new," "marvelous," "the best you ever tasted," and that it will make them stronger, more alert, ad nauseam, there is not only a definite control of data but strong positive affect. If there are no other data, no other affective potential can develop. This situation is duplicated in almost all advertising of foods, gadgets, radios, cosmetics, cars and homes, cigarettes, soft drinks, and clothing. Similarly, in political propaganda in the press, on the radio and TV; cultural taboos, beliefs, and approved patterns of thought and behavior, the same control appears.

Lest we be charged with "over-simplification," certain complicating factors may well be attended to at this point.

a. First, we may consider the role of experience of the individual, or more properly the status of his field differentiation. It should be obvious that the younger the person—other things being equal—the less likely that he has already incorporated into his field data and interpretations that oppose the new. That is to say that determining tendencies such as are here being considered are neither as numerous nor as strongly stabilized as later, although many are beginning and a few may be marked. A three-year-old child will have less protection against the statement that this or that is bad or good than will a fifteen-year-old. To avoid misunderstanding, let us point out that the badness or goodness refers to the self, and an older person as the fifteen-year-old already affected by attitudes of inferiority may have experienced reinforcement.

The intensity of experience is of course a factor. If the nine-year-old Jeanne previously mentioned had failed arithmetic; had seen her name at the bottom of the list of class members showing status in arithmetic; been sarcastically referred to by classmates or teachers; and experienced

humiliation at home, these intense experiences would have resulted in more immediate and strong dislike of arithmetic than occurred. And she might be prejudiced against participating in these groups that threaten her phenomenal self, and wish (prefer) to be alone, and if possible so behave. A beginning of later introverted behavior could be in the making.

b. The status of the source of control may play a significant role. No one would question the power of a mother to influence the early development of the personality structure. But it is seldom that the analysis is carried far enough to show that even in early months this is a process of building attitudes (through cognitive process with data of powerful affect). The "status" of the mother is easily recognized. Later in pre-school years the parents often become unquestioned controllers of data and affect.

The status of the church is also one of power. (We are not concerned here with the rightness or wrongness but only with the psychological analysis.) Whether it works through its ministers or through the parents, the process has a certain inevitableness. A small child even if it has no clear-cut notion of what sin is, or going to hell, or to heaven, cannot avoid the impact of any data given him that is designed to act as controls. Later through expansion of experience he may have some of his attitudes changed. Lying need not mean he will be damned. But other changes may not be complete enough to avoid conflict, or may constitute reinforcement. If he "learns" early that any kind of sex behavior is sinful and as a consequence has an attitude toward it resulting from this learning, later difficulties in sex patterns, presumably approved, may still present themselves since the residue of negative attitude cannot be wiped out easily, coming as it does from data, i. e. "sex acts are sinful," controlled by an authority so powerful as his religion.

c. The emotional charge of symbols and acts themselves complicate the analysis of the raw data of attitudes. "Bad," "good," "pretty," "ugly," "art," "sex," "intelligent," "stupid," "co-operation," "conflict," and so on and on. These symbols take on an affective potential as they emerge in the phenomenal field and through subsequent differentiation may become reinforced and become stable parts of the field with stable potential in the dynamics of it. They are instances of minor to major attitudes. Such symbols as "communist," "traitor," "free enterprise," "American know-how" represent rather strong and stable attitudes and when used as data either "correctly" or "incorrectly" serve to direct subsequent differentiations. Depending then upon the extent and nature of the field differentiation of a given individual, and his accept-

ance of the status of the source of data, they help to determine the intensity and direction, or reinforcement of attitudes.

d. The nature of reinforcements seems to be a decidedly complicating factor. Reinforcement of an attitude is never a simple mechanical process. It does not occur through repetition per se. The following quotation illustrates a common misunderstanding of the process of reinforcing attitudes.

"Repetition is a very important phase of all learning. If an attitude is to be fixed, a concept to be clearly and fully developed, or an item of information learned to the point of automatic response, or if some specific skill is to be acquired to an efficient degree, drill—and much of it—will be needed. If a boy lies and cheats he does so because he has learned it. That is to say, he has experienced *drill exercises* (italics ours) on these matters. The fact that he has learned to be dishonest suggests that he could have learned to be honest if only honesty had been practiced. The fixing of attitudes, contrary to general opinion, involves intensive drill. We note in passing that in advertising and in propaganda, repetition is the basic technique for fixing attitudes."[16]

We have not room to discuss all the sweeping conclusions such a statement implies. To follow the dogmatic pattern of it we might say the drill as such has no value except in fixing skills where no new insights are to be expected as in speed of typing. But it is of no value here until the necessary insights have emerged. Repetition, a far preferable term, has value in "clearly and fully developing a concept" only if succeeding approaches to it permit new insights with attendant affect.

At this time we may point out that the above statement is a beautiful illustration of the layman's misunderstanding of attitude formation. There is of course a little justification of a sort in the literature on learning, concerned with conditioning, since most of the interpreters of Pavlov overlook his extremely vital concept, the "synthesizing functions of the brain," which we may say is a close analogue to cognition in man.

Since we hope the point has been adequately made that an attitude originates in a cognitive event with attendant affect (and because it *is* a cognitive event is learned), we need not labor that here. The fixation that may occur will occur only if subsequent differentiations take place, involving the same or similar insights and the same or similar affects are re-experienced. This is not drill. If a boy "learns" to cheat it does not follow that his attitude toward cheating itself is positive. He

[16] Raleigh Schorling and G. Max Wingo. *Elementary School Student Teaching.* McGraw Hill Book Company, New York, 1950, p. 268.

may learn to cheat because his attitude toward failure is very strong and he accepts cheating, even though his attitude toward it is negative, as the only solution of his problem, i.e. to avoid failure. If he does develop a positive attitude toward cheating it can only occur in some situation in which he must conclude that cheating itself is "good," so far as his maintaining of himself is concerned. If, for example, some of his peers believe or pretend to believe that those who can cheat and thus obtain the prestige of success, or thus outwit the teacher, are "real cats" or "real cool Jacksons," cheating takes on positive affect. If *this* attitude toward cheating is reinforced, it can only be so if subsequent experiences either overt or subjective involve data determining similar conclusions and with similar affect.

To think, then, of reinforcement by drill is pure psychological nonsense. The last sentence in the quotation is particularly misleading. Advertising is, as we have previously pointed out, an outstanding illustration of adult control of data and its affect. The repetition will be effective only if the insights the victims make with their attendant affect are those the advertiser wishes and the repeated experiences with them are incorporated in the phenomenal field without much change.

e. The complexity of the event or events involved in attitude formation (again emphasizing the generic use of the term) is a decided factor in complicating our interpretation of its formation and change. We do not have too many of the attitudes representing simple conditioning of direct fear following in a single experience, such as our illustration of the child learning to fear the rain. Even in such a situation it is easy to miss some of the data involved as, for example, the brief evidence that the affect was first positive. We have been so consistently and persistently misled by such interpretations as "a strong emotional reaction," or "he is reacting emotionally," or "don't be emotional about it." These are easy escapes from the more rigorous and demanding job of determining what insights led to or were accompanied by these strong affects, and why this particular affect?

The phenomenal field of even a twelve-year-old in our complex society is very complicated. Each being unique, their perceptions of new events will either differ directly or the affect attendant on them differ because of the structure of his field. To make a close approximation to the "correct" interpretation of the events initiating and those reinforcing or reducing or changing attitudes is a difficult task, but one which will be more fruitful once we understand the nature of their genesis and differentiation. Even with increasing stabilization of a field, events of intense affect tend at times to exercise strong influence on the dy-

namics of the field and in so doing make increasingly difficult the incorporation of new events.[17]

Implications for the Public School

In the immediately previous discussion emphasis has been placed upon the control of data and its affective interpretations by adults. The public school as a particular case deserves extended consideration.

The culture insists that the school assume responsibility for developing a multitude of positive attitudes: to like or appreciate "good" reading or literature, "good" music, "good" art; to develop cooperation which implies positive attitudes toward group activities and the people involved in them; to promote positive attitudes toward country, home and other institutions; to develop the ability to "think and reason" about problems they face. This last if taken literally would require the reduction of taboos, prejudices, and fears impeding this objective.

Were the cultural forces united, these responsibilities would be difficult enough; with tumultuous conflicting forces, they become nearly impossible. Within the limits that constrict their efforts the public school has considerable success, particularly in the early years where school activities pose less threat to specific cultural groups. Children in general have a more positive attitude toward school than in the good old days nostalgic to authoritarian adults. They do tend to learn to work together which means positive attitudes toward the activities and toward their peers. This does not come about mechanically. If a child says "he likes school" there are reasons for it. He learns that it does not threaten him, that school is a place that is "good," and the affect is definitely positive. But all do not do this. If because of the limitations imposed upon the school "failure" is experienced by some in any school activity and if there are no constructive data available to them, how can they avoid some more or less specific generalizations, such as "I am not as good as the rest in .....," which may lead to dislike of ..... or to a feeling of inferiority based upon the conclusion "I am not as good as they are." It is a difficult task indeed to accomplish the desired result with conflicting interpretations of themselves and their universe imposed upon the youngster by a competitive culture, with its insistence upon innumerable taboos.

The obligation to develop appreciation of (let's say) good or better music or literature is an imposing task. The school can select the data, that is, what it considers good reading, only within limits. The hand of tradition lies heavily upon it. But much interesting reading is pro-

[17] A. H. Turney. "Differentiation of the Phenomenal Field." *op. cit.*, p. 11.

vided. But again the effect of mass instruction tends to defeat the efforts. A third-grade girl just out of school paused where I had parked by the school grounds. She stopped and looked at me for a minute and then said, "Do you know ..... .do you know why we have to read the ..... the same kind of things over and over again?" My attitude toward lying was not so strong that it prevented me from saying, "No, little girl, I don't." Of course I did. The little brown hen, the little black hen, little blue hen, to be a little bit nasty about it. But here was a negative attitude budding and growing and the data are clear and the reason for the negative affect is obvious.

One could and should write pages of specific illustrations of the task the school faces, its successes and failures, but this is not possible here. One very important problem we do wish to touch upon. There is a continual pressure on the schools to teach the youth "to think," to learn to reason and so on. Admitting that most of these mean to develop beliefs approved by this or that group in the culture, the gravity of the problem is clear. This age-old problem has been startlingly well placed in its modern setting by Chisholm in his fascinating article "Can Man Survive?"[18] Extended quotation seems justifiable. "At this early stage of his evolution, we must not take for granted that man's present dominant position on this star called Earth is necessarily permanent .... It follows then that man's natural and inevitable future lies in the further development and use of his brain, his ability to think .... His survival demands it and his evolution up to now shows it to be his only superiority over other animals ... but it is very evident that the actual thinking equipment available is not by any means used effectively to attain the ends man generally professes to want to attain. We notice that throughout man's history there have been, and still are, certain influences which prevent, in the individual and in groups, the full use of man's intellectual development. These influences, which everywhere limit man's thinking, make blind spots in his experience and distort his judgment and decisions, are his 'taboos.'

"Taboos are the social sanctions set up in all tribes of humans by interested and powerful individuals or groups and authoritatively imposed on the young to protect the privileges, ideas, or faiths of the old people .... In various human communities, taboos effect attitudes about such things as money systems, educational systems, systems of government, sexual education and behavior, marriage, clothes, health, food, and religion ....

[18] G. Brock Chisholm. "Can Man Survive?" *Nation*, 163 (1946) 63-65, 93-96.

"We find that rarely is it possible to discuss intelligently, without striking prejudices which have been inculcated in childhood such ordinary commonplace things as health, clothes, Negroes, politics, patriotism, conscience, Jews, superstitions, war and peace, money, sex, property, marriage, religions, some diseases, India, wage scales, socialism, communism, trade unions, political parties .... "[19]

His final paragraphs come close to Dewey's often misinterpreted experimental method: "Stop giving children final answers, rights and wrongs, local or other kinds of certainties, allow them to look at everything. Help them look at all available realities and encourage them to prepare to do their own thinking, independent of their parents' faiths.

"It is as simple as that, but not easy. Perhaps enough people can do it to save the human race."

It is not easy and one of our difficulties has been an inadequate understanding of attitudes and other determining tendencies. A taboo is ineffective unless it become incorporated into the field as a cognitive event initiating and sustaining a potential for action. These attitudes (including fears, wishes, hates, likes, dislikes, and inferiority feelings) are the very woof and warp of personality and not only provide the major potentials of behavior, which includes thinking, but depending upon their strength and/or reinforcement impede the incorporation of new events into the field.

If this or any other culture sought to accomplish the objective of freeing man's intellect as Chisholm states it, it would have to face clearly the implications of the processes negating the objective. Not only do these influences "limit man's thinking, make blind spots in his experiences and distort his judgment and decisions" but in strong forms this leads to neurotic and psychotic behavior, since extreme behavior deviations are the clearest of evidence of strong behavior determinants in the individual phenomenal field.

Nevertheless, giving full weight to hereditary predispositions, there is left a great promise in the possibilities that might flow from enlightened readjustments in the total educative process.

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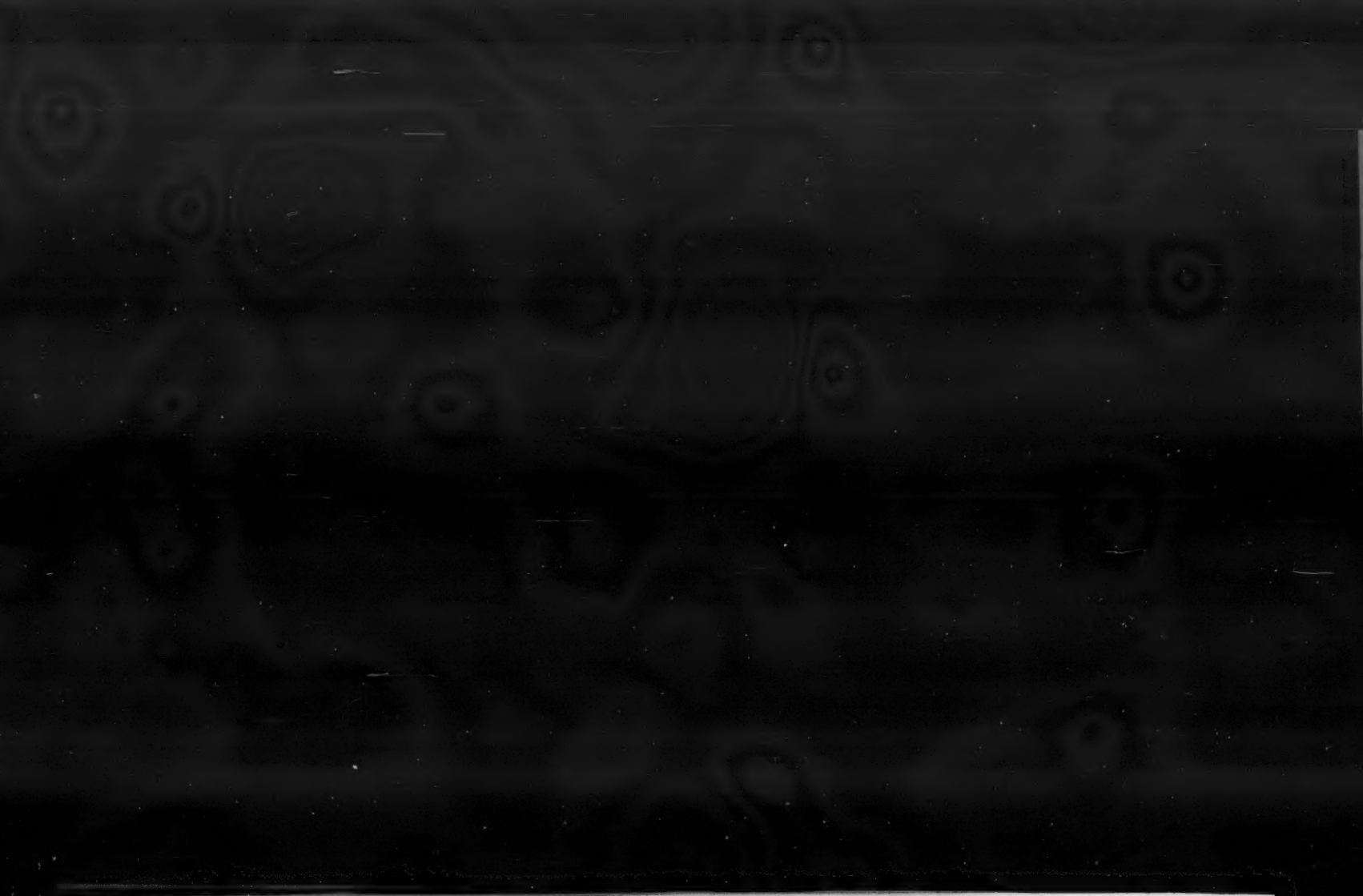
[19] *Ibid.*, p. 93-4.



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